



Fifth Annual
Seattle **EPIDEMIOLOGY & BIostatISTICS** *Summer Session*

JUNE 23-27, 2003 ♦ UNIVERSITY OF WASHINGTON CAMPUS ♦ SEATTLE, WA

S P O N S O R E D B Y



SEATTLE EPIDEMIOLOGIC
RESEARCH AND
INFORMATION CENTER



DEPARTMENT OF VETERANS AFFAIRS
VA Employee Education System
Cooperative Studies Program
VA Office of Research and Development
Rehabilitation Research and Development



UNIVERSITY OF WASHINGTON
Department of Epidemiology
Department of Biostatistics



Fifth Annual

EPIDEMIOLOGY & BIOSTATISTICS *Summer Session*

I N V I T A T I O N



The Seattle VA Epidemiologic
Research and Information Center

(ERIC) and the University of Washington

Departments of Epidemiology and Biostatistics

are pleased to invite you to the 5th Annual

Epidemiology and Biostatistics Summer

Session that will take place June 23-27, 2003,

on the University of Washington Campus,

Seattle, WA. The summer session will provide

state-of-the-art epidemiology and biostatistics

courses taught by world-renowned faculty.

The summer session is open to clinicians,

researchers, trainees and interested

administrators. Both VA and non-VA

employees are invited to attend.





SUMMER PROGRAM PLANNING COMMITTEE

Gayle E. Reiber, MPH, PhD, Course Director and Education Coordinator, Seattle ERIC

Edward J. Boyko, MD, MPH, Director, Seattle ERIC

Thomas Koepsell, MD, MPH, Associate Director, Seattle ERIC

LuAnne Couture, BA, Education Service Representative, EES, SLC-Boise Campus

Scott Davis, PhD, Department Chair, Epidemiology, University of Washington

Stuart C. Gilman, MD, MPH, FACP, Director, Health Professional Accreditation, Long Beach California

Patrick Heagerty, PhD, Associate Professor, Biostatistics, University of Washington

Anthony J. Mariano, PhD, Clinical Psychologist, VA Puget Sound Health Care System

Daniel R. Mayhew, Coordinator, VAKN EES, SLC

Phillip G. Rakestraw, PhD, Director, Center for Education & Development, VA Puget Sound Health Care System

Amy C. Shen, RPh, Investigational Drug Coordinator, VA Puget Sound Health Care System

Raymond Spry, MBA, MSOD, Senior Instruction Systems Manager, EES, SLC

Anne Toothaker, RN, Education Specialist, EES, SLC-Boise Campus



ADMINISTRATIVE STAFF

Merideth Hultman, MBA, Assistant Director, Seattle ERIC

Carrie McCloud, CPS, Program Assistant, Seattle ERIC



ACCREDITATION AND CONTINUING EDUCATION

GENERAL: The Department of Veterans Affairs Employee Education System maintains responsibility for accreditation and continuing education at the Summer Session. A certificate of attendance will be awarded to participants and accreditation records will be on file at the VA Employee Education System. In order to receive continuing education credits participants must attend 100% of the program and complete an evaluation form.

CONTINUING MEDICAL EDUCATION: The Department of Veterans Affairs Employee Education System is accredited by the Accreditation Council for Continuing Medical Education to sponsor continuing medical education for physicians. The VA Employee Education System takes responsibility for the content, quality and scientific integrity of this CME activity. The VA Employee Education System designates this educational activity for a maximum of 30 hours in category 1 credit towards the American Medical Association Physician's Recognition Award. Each physician should claim only those hours of credit that he/she actually spent in the educational activity.

CONTINUING PHARMACY
EDUCATION: The Department of Veterans Affairs Employee Education System is approved by the American Council on Pharmaceutical Education as a provider of continuing pharmaceutical education. This program is approved for 30 contact hours as program number 610-999-03-

014-L04. The VA Employee Education System maintains responsibility for the program. A statement of credit will be awarded to participants and accreditation records will be on file at the VA Employee Education System. In order to receive continuing pharmaceutical education credit, participants must attend 100% of the program and complete an evaluation form. Statements of credit will be mailed approximately six weeks after the conclusion of the program.

CONTINUING NURSING EDUCATION: The Department of Veterans Affairs Employee Education System is accredited as a provider of continuing education in nursing by the American Nurses Credentialing Center's Commission on Accreditation. The VA Employee Education System designates this educational activity for 36 contact hours as determined by the American Nurses Credentialing Center's Commission on Accreditation.

CONTINUING PSYCHOLOGY
EDUCATION: The Department of Veterans Affairs Employee Education System is approved by the American Psychological Association to offer continuing education for psychologists. The VA Employee Education System maintains responsibility for the program. As an organization approved by the American Psychological Association, the VA Employee Education System is offering this activity for 30 hours of continuing education credit.





Fifth Annual

SEATTLE EPIDEMIOLOGY & BIostatISTICS Summer Session

C O U R S E S C H E D U L E

LEARNING OBJECTIVE

To provide state-of-the-art information on epidemiology and biostatistics to epidemiologists, biostatisticians, research and clinical professionals.

TARGET AUDIENCE

Early and mid-career clinical and research staff.

TIME	TRACK 1* EPIDEMIOLOGY	TRACK 2* BIostatISTICS	TRACK 3* TOPICS IN EPIDEMIOLOGY	TRACK 4* TOPICS IN BIostatISTICS
8-10 AM M-F	1. Introduction to Epidemiology <i>Tom Koepsell, MD, MPH</i> <i>Noel Weiss, MD, DrPH</i>	3. General Biostatistics <i>Marie Diener-West, PhD</i>	6. Genetic Epidemiology <i>Karen Edwards, PhD</i>	9. Advanced Issues in Clinical Trials Using the Women's Health Initiative as an Example** <i>Ross Prentice, PhD</i> <i>Garnet Anderson, PhD</i> <i>Andrea LaCroix, MPH, PhD</i>
10 AM -12:30 PM M-F		4. Applied Regression Analysis** <i>Scott Emerson, MD, PhD</i>	7. Pharmaco-epidemiology <i>Andy Stergachis, PhD, RPh</i> <i>Malcolm Maclure, ScD</i>	10. Applied Survival Analysis <i>Patrick Heagerty, PhD</i>
2-4:30 PM M-Th	2. Developing Scientific Research Proposals (Grant Writing)** <i>Mike Gaziano, MD, MPH</i> <i>Alan Kristal, MPH, PhD</i>	5. Introduction to Stata® <i>Allen Cheadle, PhD</i>	8. Cancer Epidemiology <i>Anneclaire DeRoos, MPH, PhD</i>	11. Correlated Data Analysis <i>Norm Breslow, PhD</i>

* Students may select courses from any of the four tracks if they meet course prerequisites.

** This course will be videotaped for Fall 2003 distance/cyber learning.

C O U R S E D E S C R I P T I O N S

1. INTRODUCTION TO EPIDEMIOLOGY*Faculty: Tom Koepsell, MD, MPH, Noel Weiss, MD, DrPH*

This course aims to provide students with a basic understanding of epidemiologic methods. It is intended for students who are considering using epidemiologic study designs in their research, and for those who need a firm grounding in epidemiologic principles to interpret research results critically. Planned topics include measures of disease frequency, descriptive epidemiology, causal inference, measures of excess risk, measurement error and confounding. The course will also cover several specific study designs, including randomized trials, cohort studies and case-control studies. Discussion of examples and exercises in class will complement lectures and key readings.

*Prerequisites: None***2. DEVELOPING SCIENTIFIC RESEARCH PROPOSALS (GRANT WRITING)***Faculty: Michael Gaziano, MD, MPH, Alan R. Kristal, MPH, PhD*

Students in this course will develop skills in organizing, writing and critiquing research proposals. Students will first develop skills in writing and critiquing specific aims. Course content includes strategies for preparing and writing the background, significance and prior studies section of proposals. Instruction on developing the proposal methods section includes discussions of analysis and power by study type. The course concludes with abstract essentials, critiquing research proposals and study section realities. Students are encouraged to bring their research proposals in development. Numerous examples are provided and discussed to illustrate grant writing techniques.

*Prerequisites: None***3. GENERAL BIostatISTICS***Faculty: Marie Diener-West, PhD*

This general course introduces students to concepts and applications of biostatistics methods including descriptive statistics, exploratory data analysis, probability distributions, sampling distributions, estimation and hypothesis testing. Students will develop skills that will enable them to compare means of two groups, proportions of two groups, and means and proportions of more than two groups. The course concludes with sample size, power, analysis of variance and simple linear regression. Reading and homework will complement lectures and assist the student in developing basic competencies.

*Prerequisites: None***4. APPLIED REGRESSION ANALYSIS***Faculty: Scott Emerson, MD, PhD*

This course will overview regression methods with a particular emphasis on the scientific motivation for the use of linear and logistic regression. Specific topics include interpretation of regression model parameters, use of regression to control for confounding or to assess effect modification, analysis strategies for various types of outcome variables, predictor variables and study designs.

Prerequisites: Completion of an introductory biostatistics course.

C O U R S E D E S C R I P T I O N S

5. INTRODUCTION TO STATA®*Faculty: Allen Cheadle, PhD*

Students in this hands-on course, using Stata® 8, will learn common commands, techniques for data and file management and strategies for data checking and reading data sets into Stata® software packages. Learning strategies include lectures and hands-on sessions where students will practice skills using provided data sets.

Prerequisites: Computer familiarity and completion of a basic biostatistics course.

6. GENETIC EPIDEMIOLOGY*Faculty: Karen Edwards, PhD*

Students in this course will learn concepts of genetic susceptibility to diseases and methods for evaluating these associations. The course content includes basic principles of human genetics and implications for genetic epidemiologic studies. In addition, students will develop an understanding of genetic epidemiology study design and statistical methods used in genetic epidemiology. The course will conclude with a discussion of twin, family and population-based association studies. Lectures will be complemented by discussion of published studies, computer demonstrations and assigned readings.

Prerequisites: Completion of a basic epidemiology course.

7. PHARMACOEPIDEMIOLOGY*Faculty: Andy Stergachis, PhD, RPh, Malcolm Maclure, ScD*

Students in this course will develop an understanding of epidemiologic methods used in pharmacoepidemiology. Course contents include fundamentals of drug development and regulation, systems for post-marketing drug surveillance, research methods and design issues appropriate to pharmacoepidemiology and strengths and limitations encountered in conducting research on drug outcomes using different study designs. Discussion of examples and exercises in class will complement lectures and keyed readings.

Prerequisites: Completion of a basic epidemiology course.

8. CANCER EPIDEMIOLOGY*Faculty: Anneclaire De Roos, MPH, PhD*

Students in this course will review relevant cancer biology and develop an understanding of relevant biologic advances including cellular mechanisms across the continuum from normal cells to chromosomal instability and tumor initiation, promotion and progression. Students will learn classification of neoplasms and will briefly review the current cancer incidence and mortality patterns for major cancer sites. Students will also develop familiarity with functions of oncogenes, clonal tumor suppressor and DNA repair genes. The course will conclude with patterns of susceptibility risk factors including environmental, lifestyle and nutritional.

Prerequisites: Completion of a basic epidemiology course.



C O U R S E D E S C R I P T I O N S

9. ADVANCED ISSUES IN CLINICAL TRIALS USING THE WOMEN'S HEALTH INITIATIVE AS AN EXAMPLE

Faculty: Ross Prentice, PhD, Garnet Anderson, PhD, Andrea LaCroix, MPH, PhD

This course will enhance student understanding of clinical trials by presenting select advanced clinical trials issues and illustrating them using the Women's Health Initiative. Topics will include multisite clinical trial design, managing multisite clinical trials, strategies to monitor participant adherence, use of composite measures for monitoring trial outcomes, issues in analysis (data limitations, competing events, covariate adjustment) and disseminating study findings.

Prerequisites: Completion of an introductory clinical trials course.

Note: A free introductory clinical trials course is available at www.uwv.org/program/series.asp, click on "E", then Epidemiology: Clinical Trials.

10. APPLIED SURVIVAL ANALYSIS

Faculty: Patrick Heagerty, PhD

Students in this course will learn statistical methods for the analysis of censored survival data. In particular students will learn to characterize the survival distribution using life table methods and Kaplan-Meier methods. Statistical methods to compare the survival course for multiple groups will be introduced and regression techniques appropriate for censored survival outcomes will be discussed, including Cox proportional hazards regression methods.

Prerequisites: Completion of a basic biostatistics course and a course on regression methods.

11. CORRELATED DATA ANALYSIS

Faculty: Norm Breslow, PhD

Students in this course will be introduced to statistical methods appropriate for the analysis of correlated data. In particular, methods will be discussed for the analysis of data that come in "clusters" such as multiple measurements within a family or within a clinical practice, and regression methods for the analysis of longitudinal data. Specific topics include: how correlation arises in common epidemiological study designs, the impact correlation has on estimation, prediction and hypothesis testing, and modification of linear, logistic and Poisson regression methods. Instruction will address selection, implementation, and interpretation of appropriate regression methods such as generalized estimation equations (GEE) or linear mixed models.

Prerequisite: An understanding of linear, logistic and Poisson regression modeling and epidemiologic study designs.



COURSE DIRECTOR

Gayle E. Reiber, MPH, PhD

Education Director Seattle ERIC, VA Career Scientist, and Professor, Departments of Epidemiology and Health Services, University of Washington, Seattle, WA.

COURSE FACULTY

Garnet Anderson, PhD

Member, Public Health Sciences Division, Co-PI of the Women's Health Initiative Clinical Coordinating Center, Associate Head Gynecologic Cancer Research Program, Fred Hutchinson Cancer Research Center, and Affiliate Associate Professor, Department of Biostatistics, University of Washington, Seattle, WA.

Dr. Anderson's research emphasis is in the design, conduct and analysis of prevention trials, particularly related to women's health. She has been involved in the coordinating centers for three large prevention trials and is currently the Co-Principal Investigator and Biostatistician for the Women's Health Initiative Clinical Coordinating Center where her responsibilities include oversight of data management, analysis and reporting from over 40 clinical research sites.

Norman Breslow, PhD

Professor and former Chairman, Department of Biostatistics, University of Washington, and Member, Fred Hutchinson Cancer Research Center, Seattle, WA.

Dr. Breslow is an internationally recognized expert in biostatistical and epidemiological methodology and is particularly well known for his IARC books *The Analysis of Case-Control Studies* and *The Design and Analysis of Cohort Studies*. He is a Fellow in the American Association for the Advancement of Science, a member of the Institute of Medicine, National Academy of Sciences and Vice President/ President of the International Biometrics Society. His research interests include statistical methods in epidemiology and childhood cancer, especially Wilms tumor.

Allen D. Cheadle, PhD

Research Professor, Department of Health Services, University of Washington, Seattle, WA.

Dr. Cheadle's research focus is evaluating community-based health-promotion programs, including the development of alternative "community-level indicators" of program effect. Dr. Cheadle works with a number of local community-based organizations, assisting them with grant writing and program evaluation. He teaches research methods and computing to graduate students in the health sciences.



*Anneclaire De Roos, MPH, PhD*

Assistant Professor, Department of Epidemiology, University of Washington, and Member, Fred Hutchinson Cancer Research Center, Seattle, WA.

Dr. De Roos completed a post-doctoral fellowship at the Occupational Epidemiology Branch of the National Cancer Institute before joining the UW faculty. Her prior research includes occupational exposure assessment, associations between occupational exposures and cancer, and occupational epidemiology and parental exposures in neuroblastoma offspring. Her current studies include immunological biomarkers as predictors of non-Hodgkin's lymphoma, a case-control study of non-Hodgkin's lymphoma assessing agricultural exposures, validation of self-reported rheumatoid arthritis instruments, assessing risk factors for adult brain tumors and assessing drinking water contaminants as risk factors for colorectal and bladder cancer. She participated in teaching Epidemiologic Methods and Principles of Epidemiology at the University of North Carolina.

Marie Diener-West, PhD

Professor Department of Biostatistics, Bloomberg School of Public Health, Johns Hopkins University, Baltimore, MD.

Dr. Diener-West has worked extensively in areas of biostatistics, clinical research and clinical trials. She has served on multiple NIH study sections and is a member of the VA Cooperative Studies Evaluation Committee. She is on the editorial board or an associate editor for several journals. She is an author on more than 75 peer-reviewed publications. In 1991, 1997, 1998 and 2001, Dr. Diener-West was awarded the coveted Golden Apple Award for Excellence in Teaching at the Johns Hopkins Bloomberg School of Public Health.

Karen L. Edwards, PhD

Assistant Professor, Department of Epidemiology and the Institute for Public Health Genetics, and Director, Center for Genomics and Public Health, University of Washington, Seattle, WA.

Dr. Edwards' primary research is the genetic epidemiology of diabetes and the insulin resistance syndrome. This research includes defining multivariate phenotypes and using these phenotypes for mapping studies. She is also interested in interactions between dietary factors and genetic susceptibility to complex diseases. As Director of the Center for Genomics and Public Health she integrates advances in genetic technology into public health practice and offers research and educational opportunities for public health students and professionals. She coordinates the new degree track in genetic epidemiology, a joint effort between the Institute for Public Health Genetics and the Departments of Epidemiology and Biostatistics at the University of Washington.



Scott S. Emerson, MD, PhD

Professor, Department of Biostatistics, University of Washington, and Associate Member, Fred Hutchinson Cancer Research Center, Seattle, WA.

Dr. Emerson has been the Associate Editor of the American Journal of Epidemiology and is now the statistical editor for the Journal of the National Cancer Institute. He is a member of the FDA Advisory Committee for Reproductive Health Drugs. He is the biostatistician on studies addressing diverse topics such as colon cancer prevention, neuroblastoma, Barrett's esophagus, prostate cancer, bone marrow transplant, asthma and back pain. He received the Outstanding Teaching Award from the School of Public Health, University of Washington in 1999.

J. Michael Gaziano, MD, MPH

Director, Massachusetts Veterans Epidemiologic Research and Information Center (MAVERIC), and Associate Professor, Department of Medicine, Harvard Medical School, Boston, MA.

Dr. Gaziano is the Chief of Aging and a member of the Division of Preventive Medicine, Brigham and Women's Hospital. He is a Clinical Epidemiologist, Cardiologist and Director of the Geriatric Research Education and Clinical Center (GRECC) at the VA Boston Health Care System. He oversees a case-management model primary and secondary prevention program and fellowships in preventive cardiology and ambulatory care. His primary research interests are the epidemiology of cardiovascular and other chronic diseases, particularly lipids, oxidative stress, diet and antioxidants in atherosclerosis. Dr. Gaziano is an investigator in many large-scale research projects. He teaches in the Clinical Effectiveness Program at the Harvard School of Public Health.

Patrick J. Heagerty, PhD

Associate Professor, Department of Biostatistics, University of Washington, and Associate Member, Fred Hutchinson Cancer Research Center, Seattle, WA.

Dr. Heagerty is Associate Editor for Biometrics, Associate Editor for Biostatistics and Associate Editor for the Journal of Statistical Planning and Inference. He co-authored the textbook, *Analysis of Longitudinal Data*, 2nd Ed. Dr. Heagerty's research interests include regression techniques for dependent data. Specific areas of interest include semi-parametric regression and estimating equations, marginal models and random effects models for longitudinal data, dependence modeling for categorical time series and hierarchical models for categorical spatial data. Dr Heagerty is collaborating biostatistician for a number of research projects including the interventional studies, health services research, and cardiovascular genetics.



*Thomas D. Koepsell, MD, MPH*

Professor and former Chairman, Department of Epidemiology, University of Washington, Seattle, WA.

Dr. Koepsell has conducted epidemiologic research on a wide variety of non-infectious diseases, particularly injury and conditions of the musculoskeletal, cardiovascular and nervous systems. He has also applied epidemiologic methods in health services research, particularly for evaluating community-based health promotion and disease prevention programs. He is the author or co-author of over 250 published articles. He and colleague Dr. Noel Weiss have co-taught a popular two-quarter graduate course sequence in epidemiologic methods for over 15 years. Dr. Koepsell is the recipient of three prizes for outstanding teaching and has served as President of the Society for Epidemiologic Research.

Alan Kristal, MPH, PhD

Professor, Department of Epidemiology, University of Washington, and Associate Head, Cancer Prevention Research Program and Program in Prostate Cancer, Fred Hutchinson Cancer Research Center, Seattle, WA.

Dr. Kristal serves on the American Council on Science and Health, Board of Scientific and Policy Advisors and is an Associate Editor of the American Journal of Epidemiology and the American Journal of Health Promotion. His research includes the influence of diet, exercise and psychosocial factors on development of diabetes, cardiovascular disease, and cancer. His current research focus is the role of dietary fat in breast cancer, the relationship between dietary supplements and cancer risk, diet and prostate cancer and dietary intervention and intermediate markers for Barrett's Esophagus. Dr. Kristal is involved in teaching and mentoring graduate students at the University of Washington and Fred Hutchinson Cancer Research Center.

Andrea Z. LaCroix, MPH, PhD

Co-Principal Investigator of the Women's Health Initiative Clinical Coordinating Center and Member, Fred Hutchinson Cancer Research Center, Professor, Department of Epidemiology, University of Washington, and Scientific Investigator, Center for Health Studies, Group Health Cooperative, Seattle, WA.

Dr. LaCroix joined the faculty at the University of Washington in 1989 and the Clinical Coordinating Center of the Women's Health Initiative in 1996. Her principal research focus is on conducting prevention and treatment trials to improve older women's health, specifically prevention of osteoporosis, fractures, breast cancer and cardiovascular disease. Areas of current emphasis include the Women's Health Initiative, trials testing alternative strategies to reduce menopausal symptoms and bone loss, trials evaluating the effect of new medications on the risk of fractures and breast cancer, and studies designing and evaluating state-of-the-art preventive service programs for older women in managed care settings.

Malcolm Maclure, ScD

Professor and Michael Smith Foundation Distinguished Scholar, School of Health Information Science, University of Victoria, Victoria, BC, Canada, Adjunct Professor,





Department of Epidemiology, Harvard School of Public Health Boston, MA, Affiliate Professor, Department of Pharmacy, University of Washington Seattle, WA.

Dr. Maclure has expertise in epidemiology methods, pharmacoepidemiology, cardiovascular and cerebrovascular disease treatment and prevention strategies. He was the former Senior Healthcare Epidemiologist for the Ministry of Health in British Columbia. He received the Kenneth Rothman Epidemiology Prize in 2001 and was listed as one of British Columbia's six Best and Brightest in Health Research in 2001. He has authored over 50 peer-reviewed papers.

Ross Prentice, PhD

Professor, Department of Biostatistics, University of Washington, Former Director, Public Health Sciences Division, and Principal Investigator, Women's Health Initiative Clinical Coordinating Center, Fred Hutchinson Cancer Research Center, Seattle, WA.

Dr. Prentice is a member of the Institute of Medicine, National Academy of Science. He has served as Associate Editor and Editorial Board Member for numerous biostatistics, epidemiology and cancer journals. He has authored books on the *Statistical Analysis of Failure Time Data*, *Environmental Epidemiology: Risk Assessment* and *Modern Statistical Methods in Chronic Disease Epidemiology*. He has over 225 peer-reviewed publications on statistical methodology and biostatistics topics.

Andy S. Stergachis, PhD, RPh

Professor, Department of Epidemiology and Affiliate Professor, Pharmaceutical Outcomes Research and Policy Program, Department of Pharmacy, University of Washington, Seattle, WA.

Dr. Stergachis' research interests are pharmacoepidemiology and the epidemiology of biological and chemical hazards. He has served on NIH's Epidemiology and Disease Control Study Section and is presently a member of the AHRQ Health Systems Research Study Section and the Institute of Medicine's Committee on Poison Prevention and Control. Through his affiliation with the Northwest Center for Public Health Practice, he focuses on education, training and research in emergency preparedness with the public health and clinical practice community. His current research includes studies of adverse events associated with biologics and other types of pharmaceuticals with the United Health-Care health systems databases. He has published over 100 articles and book chapters.

Noel S. Weiss, MD, MPH, DrPH

Professor and former Chairman, Department of Epidemiology, University of Washington, and Member, Fred Hutchinson Cancer Research Center, Seattle, WA.

Dr. Weiss participates in many national and local research review groups. He teaches epidemiology methods and clinical epidemiology at the University of Washington. He has a worldwide reputation among his students in the public health field for his "open door" mentoring and recently received the first University of Washington Award for Distinguished Graduate Mentoring. He and Dr. Koepsell teach a popular 2-quarter graduate course sequence in epidemiologic methods at the University of Washington. Dr. Weiss has published over 400 peer-reviewed papers.





Non-VA Employee Application Deadline and Tuition

The application and payment deadline is May 5, 2003. Enrollment is limited and applications received after May 5, 2003 will be considered on a space available basis. Early application is highly encouraged. Applications postmarked by April 15, 2002 will receive a \$200 tuition discount. Please send application materials and payment to: Carrie McCloud, CPS, Department of Epidemiology, School of Public Health, University of Washington, Box 358280 (152 E), Seattle, WA 98195.

*Early Tuition Discount	\$1,395 (\$50 non-refundable)
**Regular Tuition	\$1,595 (\$50 non-refundable)

* Tuition fee for applications postmarked by April 15, 2003.

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As a part of VA sponsorship we are pleased to offer a limited number of tuition exempt slots for VA and VA affiliate employees. *To qualify for VA tuition exemption the applicant needs to provide a photocopy of his/her official VA identification badge.* If you have any question as to whether or not you qualify as a VA or VA affiliate employee, please contact Carrie McCloud, CPS at (206) 764-2773 or e-mail Carrie.McCloud@med.va.gov.

Book Fees

Along with confirmation of registration each student will be sent a list of required textbooks and a University of Washington book order form. While each student is required to have access to his/her own copy of the course texts during each class, there is no requirement to purchase these texts from the University of Washington. Each student should expect to spend approximately \$150 on textbooks for the entire Summer Session.

Cancellation and Refund Policy

To cancel your application and receive a course refund (less the \$50 handling fee) please contact Carrie McCloud at (206) 764-2773. Cancellation request should be received by June 17, 2003. Due to scheduling commitments we regret that we cannot offer a housing refund after June 2, 2003.



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PLEASE TYPE OR PRINT

Name:	Dr. <input type="checkbox"/>	Mr. <input type="checkbox"/>	Ms. <input type="checkbox"/>	Mrs. <input type="checkbox"/>	SSN (last 4 digits only): ____ _ <small>(required for continuing education credits only)</small>																		
Title:	Organization:																						
Degrees:	MD <input type="checkbox"/>	PhD <input type="checkbox"/>	PharmD <input type="checkbox"/>	RN <input type="checkbox"/>	DPM <input type="checkbox"/>	MPH <input type="checkbox"/>	Other <input type="checkbox"/>	Specify:															
Address:																							
City:	State:		ZIP:		Country:																		
Phone:	Fax:			Email:																			
Would you like on-campus housing? Yes <input type="checkbox"/> No <input type="checkbox"/> <small>(Room and board description on p. 19)</small>																							
Would you like a board plan? Yes <input type="checkbox"/> No <input type="checkbox"/>																							
Do you have any special needs we can help you with? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, please specify <input style="width: 150px;" type="text"/>																							
<table style="width: 100%;"><tr><td style="width: 50%;">Tuition (on or before April 15, 2003)</td><td style="width: 20%; text-align: right;">\$1,395</td><td style="width: 30%; text-align: right;">\$ _____</td></tr><tr><td>Tuition (after April 15, 2003)</td><td style="text-align: right;">\$1,595</td><td style="text-align: right;">\$ _____</td></tr><tr><td>Room (on-campus housing)</td><td style="text-align: right;">\$220</td><td style="text-align: right;">\$ _____</td></tr><tr><td>Room and Board</td><td style="text-align: right;">\$300</td><td style="text-align: right;">\$ _____</td></tr><tr><td colspan="2">TOTAL AMOUNT ENCLOSED</td><td style="text-align: right;">\$ _____</td></tr></table>									Tuition (on or before April 15, 2003)	\$1,395	\$ _____	Tuition (after April 15, 2003)	\$1,595	\$ _____	Room (on-campus housing)	\$220	\$ _____	Room and Board	\$300	\$ _____	TOTAL AMOUNT ENCLOSED		\$ _____
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Room and Board	\$300	\$ _____																					
TOTAL AMOUNT ENCLOSED		\$ _____																					
How did you hear about the course? Colleague <input type="checkbox"/> Journal advertisement <input type="checkbox"/> Other <input type="checkbox"/> Specify: <input style="width: 100px;" type="text"/>																							
Check box if you have taken a graduate-level course in: Biostatistics <input type="checkbox"/> Epidemiology <input type="checkbox"/>																							
Have you attended any previous summer courses in epidemiology and biostatistics? University of Michigan <input type="checkbox"/> Year <input style="width: 50px;" type="text"/> Johns Hopkins <input type="checkbox"/> Year <input style="width: 50px;" type="text"/> Ohio State University <input type="checkbox"/> Year <input style="width: 50px;" type="text"/> Other <input type="checkbox"/> Please specify: <input style="width: 100px;" type="text"/> Year <input style="width: 50px;" type="text"/>																							

C O U R S E S E L E C T I O N S

Courses are offered on a first-come, first-served basis.

Please rank the courses you want to take in priority order (1=highest priority)

8-10 AM	Rank 1-4: ___ Introduction to Epidemiology (four-hour block) ___ General Biostatistics ___ Genetic Epidemiology ___ Advanced Issues in Clinical Trials Using the Womens Health Initiative as an Example
10:30 AM - 12:30 PM	Rank 1-4: ___ Introduction to Epidemiology (continued from above) ___ Applied Regression Analysis ___ Pharmacoepidemiology ___ Applied Survival Analysis
2-4:30 PM	Rank 1-4: ___ Developing Scientific Research Proposals (Grant Writing) ___ Introduction to Stata® ___ Cancer Epidemiology ___ Correlated Data Analysis
SPECIAL ACTIVITIES Do you plan to attend these functions included in your registration: Monday evening reception at the Burke Museum of Natural History? Yes <input type="checkbox"/> No <input type="checkbox"/> Wednesday evening dinner at the South Campus Center Portage Bay Overlook? Yes <input type="checkbox"/> No <input type="checkbox"/>	
I HAVE READ AND UNDERSTAND THE CANCELLATION POLICY	
Signature:	Date:



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Applications must be received by May 5, 2003. Send application materials to: Carrie McCloud, CPS, Department of Epidemiology, School of Public Health, University of Washington, Box 358280 (152 E), Seattle, WA 98195. Room and board must be paid by check or money order in U.S. dollars and accompany this application. Please make check or money orders payable to the University of Washington.

PLEASE TYPE OR PRINT

Name:	Dr. <input type="checkbox"/>	Mr. <input type="checkbox"/>	Ms. <input type="checkbox"/>	Mrs. <input type="checkbox"/>	SSN (last 4 digits only): ____ _ <small>(required for continuing education credits only)</small>																		
Title:	Organization:																						
Degrees:	MD <input type="checkbox"/>	PhD <input type="checkbox"/>	PharmD <input type="checkbox"/>	RN <input type="checkbox"/>	DPM <input type="checkbox"/>	MPH <input type="checkbox"/>	Other <input type="checkbox"/>	Specify:															
Address:																							
City:	State:	ZIP:	Country:																				
Phone:	Fax:			Email:																			
Would you like on-campus housing? Yes <input type="checkbox"/> No <input type="checkbox"/> (Room and board description on p. 19)																							
Would you like a board plan? Yes <input type="checkbox"/> No <input type="checkbox"/>																							
Do you have any special needs we can help you with? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, please specify <input style="width: 150px;" type="text"/>																							
<table style="width: 100%;"><tr><td style="width: 40%;">Tuition</td><td style="width: 20%; text-align: right;">\$1,595</td><td style="width: 40%; text-align: right;"><i>Paid by the VA</i></td></tr><tr><td colspan="3"><small>Please provide a photocopy of your official VA identification badge.</small></td></tr><tr><td>Room (on-campus housing)</td><td style="text-align: right;">\$220</td><td style="text-align: right;">\$ <input style="width: 100px;" type="text"/></td></tr><tr><td>Room and Board</td><td style="text-align: right;">\$300</td><td style="text-align: right;">\$ <input style="width: 100px;" type="text"/></td></tr><tr><td>TOTAL AMOUNT ENCLOSED</td><td></td><td style="text-align: right;">\$ <input style="width: 100px;" type="text"/></td></tr></table>									Tuition	\$1,595	<i>Paid by the VA</i>	<small>Please provide a photocopy of your official VA identification badge.</small>			Room (on-campus housing)	\$220	\$ <input style="width: 100px;" type="text"/>	Room and Board	\$300	\$ <input style="width: 100px;" type="text"/>	TOTAL AMOUNT ENCLOSED		\$ <input style="width: 100px;" type="text"/>
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TOTAL AMOUNT ENCLOSED		\$ <input style="width: 100px;" type="text"/>																					
How did you hear about the course? Colleague <input type="checkbox"/> Journal advertisement <input type="checkbox"/> Other <input type="checkbox"/> Specify: <input style="width: 100px;" type="text"/>																							
Have you ever taken a graduate-level course in: Biostatistics? <input type="checkbox"/> Epidemiology? <input type="checkbox"/>																							
Have you attended any previous summer courses in epidemiology and biostatistics?																							
University of Michigan <input type="checkbox"/> Year <input style="width: 50px;" type="text"/>			Ohio State University <input type="checkbox"/> Year <input style="width: 50px;" type="text"/>																				
Johns Hopkins <input type="checkbox"/> Year <input style="width: 50px;" type="text"/>			Other <input type="checkbox"/> Please specify: <input style="width: 100px;" type="text"/> Year <input style="width: 50px;" type="text"/>																				

C O U R S E S E L E C T I O N S

Courses are offered on a first-come, first-served basis.

Please rank the courses you want to take in priority order (1=highest priority)

8-10 AM	<p>Rank 1-4:</p> <p>___ Introduction to Epidemiology (four-hour block)</p> <p>___ General Biostatistics</p> <p>___ Genetic Epidemiology</p> <p>___ Advanced Issues in Clinical Trials Using the Women's Health Initiative as an Example</p>
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10:30 AM - 12:30 PM	<p>Rank 1-4:</p> <p>___ Introduction to Epidemiology (continued from above)</p> <p>___ Applied Regression Analysis</p> <p>___ Pharmacoepidemiology</p> <p>___ Applied Survival Analysis</p>
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2-4:30 PM	<p>Rank 1-4:</p> <p>___ Developing Scientific Research Proposals (Grant Writing)</p> <p>___ Introduction to Stata®</p> <p>___ Cancer Epidemiology</p> <p>___ Correlated Data Analysis</p>
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SPECIAL ACTIVITIES

Do you plan to attend these functions (included in your registration fee):

Monday evening reception at the Burke Museum of Natural History?

Yes ☐ No ☐

Wednesday evening dinner at the South Campus Center Portage Bay Overlook?

Yes ☐ No ☐

TECHNICAL ASSISTANCE

ERIC core researchers and University of Washington faculty will be available to provide technical assistance on your research topics. Technical assistance is available 4:30-5:30 PM Monday through Thursday. Advance scheduling is needed to request assistance.

Would you like to schedule technical assistance from course or UW faculty? Yes ☐ No ☐

What research topic would you like assistance with? _____

You will be contacted via email for more information about your request.

I HAVE READ AND UNDERSTAND THE CANCELLATION POLICY

Signature:

Date:

ON-CAMPUS HOUSING

On-campus housing is in Hansee Residence Hall on the University of Washington campus and is available for \$220 for a single room. The college dormitory room is furnished with a twin-size bed, a dresser, a desk, bed linens, towels, soap and drinking cups. There is a telephone and internet connection in each room. Separate shared bath facilities are located on all floors and laundry facilities are available in each building. Television lounges and kitchenettes are located on most floors. The residence hall is a smoke-free environment. Please note that the dormitory rooms in no way resemble a class hotel. If these accommodations are not acceptable to you we have provided a list of hotels near the University of Washington Campus.

BOARD

A meal plan is available to individuals requesting on-campus housing for an additional \$80. The plan includes 5 breakfasts and 4 lunches available at various on-campus cafeterias.

HOTELS

If you elect not to stay in campus dorms, four hotels close to the University of Washington follow:

University Silver Cloud Inn

5036 25th Avenue NE
 Seattle, WA 98105
 Phone (800) 205-6940
<http://www.scinns.com/universi.htm>
 Room Rate \$94-\$112
 Mention your conference is being held at the University of Washington.

Best Western University Tower

4507 Brooklyn Ave NE
 Seattle, WA 98105
 Phone (800) 899-0251
<http://www.meany.com>
 Room Rate \$129

The University Inn

4140 Roosevelt Way NE
 Seattle, WA 98105
 Phone (800) 733-3855
<http://www.universityinnseattle.com/>
 Room Rate \$102-129

University Plaza Hotel

400 NE 45th St.
 Seattle, WA 98105
 Phone (206) 634-0100
<http://www.universityplazahotel.com/>
 Room Rate \$99-190

ABOUT SEATTLE

Seattle's cultural scene flourishes with opera, ballet, art galleries, and more equity theaters than any American city outside New York. Music ranges from alternative and rock 'n' roll to urban jass and the internationally acclaimed Seattle Symphony. The nation's oldest continually working farmer's market (since 1907), Pike Place is a celebration of fresh regional fruits and vegetables, seasonal flowers, herbs, seafood, spices, cheeses, hand-crafted work by artisans, eclectic shops, and fine restaurants and eateries; many with views of ferry and freighter traffic on Elliott Bay. Around Seattle the best in urban recreation is at your fingertips; spectacularly scenic golf, kayaking and canoeing, fishing and clamming and hiking. A short drive out of the city takes you to river rafting, hiking and scenic National Parks.





CARRIE MCCLOUD, CPS
DEPARTMENT OF EPIDEMIOLOGY
SCHOOL OF PUBLIC HEALTH
UNIVERSITY OF WASHINGTON
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SEATTLE, WA 98195